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(FORM UPDATED: 08/11/2010)

# WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2009-10

(session year)

# Senate

(Assembly, Senate or Joint)

Committee on Environment...

# **COMMITTEE NOTICES ...**

- Committee Reports ... CR
- Executive Sessions ... ES
- Public Hearings ... PH

# INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... Appt (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)

(ab = Assembly Bill)

(ar = Assembly Resolution)

(ajr = Assembly Joint Resolution)

(sb = Senate Bill)

(**sr** = Senate Resolution)

(sjr = Senate Joint Resolution)

Miscellaneous ... Misc

<sup>\*</sup> Contents organized for archiving by: Stefanie Rose (LRB) (September 2013)

## **Senate**

# **Record of Committee Proceedings**

# Select committee on Clean Energy

#### Senate Bill 450

Relating to: goals for reductions in greenhouse gas emissions, for construction of zero net energy buildings and for energy conservation; information, analyses, reports, education, and training concerning greenhouse gas emissions and climate change; energy efficiency and renewable resource programs; renewable energy requirements of electric utilities and retail cooperatives; requiring electric utilities to purchase renewable energy from certain renewable facilities in their service territories; authority of the Public Service Commission over nuclear power plants; motor vehicle emission limitations; a low carbon standard for transportation fuels; the brownfield site assessment grant program, the main street program, the brownfields grant program, the forward innovation fund, grants to local governments for planning activities, the transportation facilities economic assistance and development program, a model parking ordinance; surface transportation planning by the Department of Transportation and metropolitan planning organizations to reduce greenhouse gas emissions; environmental evaluations for transportation projects; idling limits for certain vehicles; energy conservation codes for public buildings, places of employment, one- and two-family dwellings, and agricultural facilities; design standards for state buildings; energy efficiency standards for certain consumer audio and video devices, boiler inspection requirements; greenhouse gas emissions and energy use by certain state agencies and state assistance to school districts in achieving energy efficiencies; creating an exception to local levy limits for amounts spent on energy efficiency measures; creating an energy crop reserve program; identification of private forest land, promoting sequestration of carbon in forests, qualifying practices and cost-share requirements under the forest grant program established by the Department of Natural Resources; air pollution permits for certain stationary sources reducing greenhouse gas emissions; allocating a portion of existing tax-exempt industrial development revenue bonding to clean energy manufacturing facilities and renewable power generating facilities; requiring a report on certain programs to limit greenhouse gas emissions; granting rule-making authority; requiring the exercise of rule-making authority; and providing a penalty.

By Senators Miller and Plale; cosponsored by Representatives Black and Soletski, by request of Governor James E. Doyle.

January 07, 2010 Referred to Select Committee on Clean Energy.

January 20, 2010 PUBLIC HEARING HELD

Present: (0) None.

Absent: (0) None.

#### Appearances For

• None.

#### Appearances Against

None.

#### Appearances for Information Only

None.

#### Registrations For

None.

#### Registrations Against

• None.

#### Registrations for Information Only

None.

#### January 27, 2010 PUBLIC HEARING HELD

Present: (8) Senators Miller, Plale, Wirch, Hansen, Jauch,

Grothman, Kanavas and Lazich.

Absent: (0) None.

#### Appearances For

- Eric Callisto Chairman, Public Service Commission
- Matt Frank Secretary, Department of Natural Resources
- Dick Leinenkugel Secretary, Department of Commerce
- Jeff Crawford, Milwaukee Forest County Potawatomi
- Forrest Ceel, Menomonee Falls Local 2150 of the International Brotherhood of Electrical Workers
- Jonathan Patz, M.D., M.P.H., Madison Professor, University of Wisconsin-Madison
- Joel Charles, Middleton UW Medical School--Public Health Interest Group
- Jesse Charles, Green Bay
- Steve Ostrenga, Burlington Helios USA
- Bill Mc Clenahan, Chicago Invenergy Wind
- Keith Reopelle, Madison Clean Wisconsin
- Joel Haubrich, Milwaukee Wisconsin Energy Corp.

- Dan Kohler, Madison Wisconsin Environment
- John Sumi, Madison Madison Gas and Electric Co.
- Ron Burke , Chicago Union of Concerned Scientists--Midwest Office
- David Boetcher, Waunakee Wisconsin IBEW--Inside Construction Locals
- Frank Jablonski, Madison Nuclear Energy Institute
- Michael Vickerman, Madison RENEW Wisconsin
- Bill Christofferson, Milwaukee Wisconsin Network for Peace
   & Justice
- Ed Ritger, Random Lake rural landowners
- Brian Antonich, Minneapolis Horizon Wind Energy, LLC
- Lincoln Tice, Madison Full Spectrum Solar
- Shahla Werner, Madison Sierra Club
- Jennifer Nordstrom, Racine Institute for Energy & Environmental Research
- Rosy Ricks, Milwaukee
- Royal Elmore, Madison
- Diane Farsetta, Madison Wisconsin Network for Peace and Justice

#### Appearances Against

- Jim Ott Representative, 23rd Assembly District
- Todd Stuart Wisconsin Industrial Energy Group
- Tom Scharff New Page
- Ed Wilusz Wisconsin Paper Council
- Scott Manley, Madison Wisconsin Manufacturers & Commerce
- Brian Mitchell, Oconomowoc Wisconsin Cast Metals Association
- Bob Seitz, Madison Wisconsin Utility Investors, Inc.

#### Appearances for Information Only

- Kevin Crawford, Manitowoc Orion Energy Systems
- Neal Verfeurth, Manitowoc Orion Energy Systems
- BIll Skewes, Madison Wisconsin Utilities Association
- Emily Hiatt Dairyland Power
- David Donovan Xccel Energy
- David Dahlberg North Central Power
- John Richards Northwestern Wisconsin Electric
- John Barnes, Verona No Nuclear Coalition
- Dave Steffenson, Ph. D., Madison Rev., The Upstream Institute for Ecological Ethics

• Edward Kuharski, Madison — Mother Earth & Her Good Sense in Housekeeping

#### Registrations For

- Jeanne Hoffman, Madison City of Madison
- Paul Soglin, Madison Energies Direct, LLC
- Scott Barnum, Milwaukee Verterra Energy, LLC
- David J. Koene, Madison Madison Area Peace Coalition
- John La Forge, Luck Nukewatch
- Sara Barczak, Milwaukee Southern Alliance for Clean Energy
- Chris Collins, Madison H&H Solar Energy Services
- James Yocky, Madison Seventh Generation Energy System
- Pam Kleiss, Madison PSR Wisconsin
- Ted M. Petith, Madison TMP Project Development
- Larry Krom, Spring Green L & S Technical Associates, Inc.
- Todd Halschbach, Madison The Nature Conservancy
- Kathryn Walter, Madison
- L.D. Rockwell, Elkhorn
- Sarah Shanahan, New Lisbon
- Guy Selsmeyer, Little Suamico Northern Biogas
- Dino Zucchi, Columbus
- Walker Shapiro, Madison
- Steve Books, Mount Horeb
- Jim Connors, Madison
- Brian Strebel, Madison
- David Benforado, Sun Prairie Executive Director, Municipal Electric Utilities of Wisconsin
- Alicia Leinberger, Madison Seventh Generation Energy Systems
- Rick Bergman, Grafton
- George Edgar, Madison Wisconsin Energy Conservation Corp.
- Casey Anderson, Madison
- Evan Western, Madison
- Amy Laspe, Madison
- Seth Nowak, Madison ACEEE
- Judy Miner, Madison Wisconsin Network for Peace & Justice
- Lindsay North, Madison
- Ryan Schryver, Madison
- Shaina Kilcoyne, De Forest
- Richelle Lisse Lehmann, Middleton
- Steve Burns, Madison Wisconsin Network for Peace & Justice
- Michelle Yun, Madison

Jason Holzman, Middleton — UW-Madison Nuclear Engineers

#### Registrations Against

- Ron Kuehn, Madison Murphy Oil USA Superior, WI
- Andrew Cook, Madison American Coalition for Clean Coal Electricity
- Jeff Lyon, Madison Wisconsin Farm Bureau
- Brandon Schulz, Madison Wisconsin Grocers Association
- Bill G. Smith, Madison National Federation of Independent Business
- Beata Kalies, Madison Wisconsin Electric Cooperatives
- Pam Christenson, Madison WI Petroleum Marketers & Convenience Store Assoc.
- Pat Osborne, Madison Marathon Oil
- Pat Osborne, Madison Aggregate Producers of Wisconsin
- Andrew Cook, Madison Alliance of Automobile Manufacturers
- Mary Ann Gerrard, Madison Wisconsin Automobile & Truck Dealers Association
- Nick George, Madison Midwest Food Processors Association
- Betsy Ahner, Madison WIsconsin Propane Gas Association
- Steve Lewallen, Neenah Wisconsin Cast Metals Association
- Marc Bentley, Madison Wisconsin Motor Carriers
- Marc Bentley, Madison Wisconson Engine Manufacturing and Distribution Alliance
- Marc Bentley, Madison Schneider National
- Marc Bentley, Madison Marten Transport
- Robin Vos Representative, 63rd Assembly District

#### Registrations for Information Only

- Seth Jensen, Madison Wisconsin Network for Peace and Justice
- Chris Kustra, Deerfield
- Kurt Koepp, Milwaukee/McFarland Hot Water Products, Inc
- Cassandra Dixon, Wisconsin Dells
- Mary Beth Schlagheck, Windsor
- Charlie Higley, Madison Citizens Utility Board

#### February 10, 2010 PUBLIC HEARING HELD

Present: (7) Senators Miller, Plale, Wirch, Hansen, Jauch,

Grothman and Lazich.

Absent: (1) Senator Kanavas.

#### Appearances For

- Keith Roepelle, Madison Clean Wisconsin
- Peter Taglia, Madison Clean Wisconsin
- Rod Nilsestuen, Madison Secretary, Department of Agriculture,
   Trade and Consumer Protection
- Rick Adamski, Seymour himself
- Keith Spruce, Milwaukee himself
- Judy Skog, Madison herself
- Dan Nemke, Milwaukee Clear Horizons
- Scott McNab, Chicago Pennan Energy
- Tony Hartmann, Middleton Great Lakes Ag Energy & Green Diesel Wisconsin Foundation
- Dave Merritt, Madison Dane County
- John Welch, Madison Dane County
- Don Ferber, Madison Sierra Club
- Bridget Holcomb, Madison Michael Fields Agricultural Institute
- Mark Torresani, Middleton Cornerstone Enviornmental Group
- Andy Grimmer, Madison AWGI Energy & Natural Gas Vehicle Industry
- Steve Hiniker, Madison 1000 Friends of Wisconsin
- Eric Sundquist, Madison himself
- Joel Haubrich, Milwaukee We-energies
- Johanna Lathrop, Madison WISPIRG
- Dona Wininsky, Brookfield American Lung Association
- Steve Brooks, Mt. Horeb himself
- Hans Noleldner, Oregon himself

#### Appearances Against

- David Podratz, Superior Murphy Oil USA, Inc.
- Thomas Walker, Madison Wisconsin Transportation Builders Assn.
- Matt Hauser, Madison WI Petroleum Marketers & Convenience Store Assn.
- Jack Sobczak, Fox Point Lakeside Oil Co.
- Scott Manley, Madison WMC
- Jeff Schoepke, St. Paul Flint Hills Resources Koch Companies
- Jay Reinhardt, St. Paul Flint Hills Resources KochCompanies
- Bob Welch, Madison WI Corn Growers
- Jeff Lyon, Madison Wisconsin Farm Bureau
- Richard Frazier, Caledonia himself
- Laura Dooley, Arlington Alliance of Automobile Manufacturers

- Andrew Cook, Arlington Alliance of Automobile Manufacturers
- Richard Kandansky, Madison Marathon Petroleum Co.
- Bob Fassbender, Madison Marathon Petroleum Co.
- Dan Gunderson, Madison American Petro. Institute

#### Appearances for Information Only

- Brian Herman, Chicago Consulate General of Canada
- Georges Rioux, Chicago Consulate General of Canada
- Andy Lisak, Superior The Development Association
- Gary Radloff, Madison Wisconsin Bioenergy Initiative
- Brendan Jordan, Minneapolis Midwest Governor's Association
- Mike Stranz, Madison Wisconsin Farmers Union
- Jesse Charles, Green Bay himself
- Maggie Grabow, Wauwatosa University of Wisconsin-Madison
- Melissa Whited, Madison University of Wisconsin-Madison

#### Registrations For

- Jamie Derr, Marshall Derr Family Farm
- Steve Steinhoff, Madison himself
- Shahla Werner, Madison herself
- David Hansen, Oconomowoc Electric Change Mobility
- Yang Xie, Fitchburg self
- Gary Goyke, Madison Wisconsin Urban & Rural Transit Association
- Rick Chamberlin, Sauk City himself
- Laura Stoesz, Madison herself
- Amanda Matt, Madison herself
- David Vitse, Madison himself
- Seth Nowak, Madison ACEEE
- Svein Morner, Madison Sustainable Energy LLC

#### Registrations Against

- Bill Sepic, Madison Wisconsin Auto & Truck Dealers Assn.
- Nick George, Madison Midwest Food Processors Assn.
- Jordan Lamb, Madison Wisconsin Pork Assn.
- Jordan Lamb, Madison Wisconsin Potato & Vegetable Assn.
- Jolene Plautz, Mequon Kwik Trip
- Marc Bently, Madison WI Engine Manufacturers & Distributers Alliance
- Marc Bently, Madison Schneider National
- Marc Bently, Madison Marten Transport

- Jordan Lamb, Madison WI Cattlemen's Assn.
- Dan Gunderson, Madison Enbridge
- Brad Boycks, Madison Wisconsin Builders Assn.
- Katie Walby, Madison GM
- Tom Howells, Madison Wisconsin Motor Carriers Assn.
- Jason Childress, Madison Kwik Trip

## Registrations for Information Only

• Keith Spruce, Milwaukee — AIA

## February 11, 2010 PUBLIC HEARING HELD

Present: (8) Senators Miller, Plale, Wirch, Hansen, Jauch,

Grothman, Kanavas and Lazich.

Absent: (0) None.

#### Appearances For

- Andrea Kaminski, Madison League of Women Voters
- Margi Kindig, Madison
- Peter Bakken, Sun Prairie Wisconsin Council of Churches
- Martin David, Middleton
- Brett Hulsey, Madison Dane County
- Bob Jones, Madison WISCAP

#### Appearances Against

- Paula Quinn, Hartland
- Bob Thill, Cedarburg Maynard Steel

## Appearances for Information Only

- Terry Mulville, Berlin Sunny Solutions, LLC
- Allison Hannon, Chicago The Climate Group

#### Registrations For

- Megan Phillips, Madison
- John Young, Madison Resource Solar, LLC
- Cindy Rose, Verona
- Dino Zucchi, Columbus

#### Registrations Against

- Pamela Thill, Cedarburg
- Sharon Blank, Sussex
- Peggy Kirby, Brookfield

- Lori Schmeling, Hartland
- David Storey, Madison Wisconsin Retail Council
- Nick George, Madison Midwest Food Processors Association

## Registrations for Information Only

• None.

April 22, 2010 Failed to pass pursuant to Senate Joint Resolution 1.

Elizabeth Bier Committee Clerk



# WISCONSIN STATE LEGISLATURE



To: Senator Jeff Plale - Chair, Senate Committee on Commerce, Utilities, Energy, and Rail

Senator Mark Miller - Chair, Senate Committee on Environment

Representative Jim Soletski – Chair, Assembly Committee on Energy and Utilities Representative Spencer Black – Chair, Assembly Committee on Natural Resources

Copy: Governor Jim Doyle

Wisconsin State Legislatures

Members, Governor's Task Force on Global Warming

The Homegrown Renewable Energy Campaign was formed in 2009 to advance policies that would build Wisconsin's rural economies by spurring investments in renewable energy technologies.

#### Campaign Sponsors Include:

A-A Exteriors.com

Agrecol Corporation
Arch Electric, LLC

Artha Sustainable Living Center LLC, Amherst

Artha Sustainable Living Center LLC, Amners

**Better Environmental Solutions** 

Biomass Solution
Bubbling Springs Solar

Cardinal Solar, Sun Prairie

Clean Wisconsin Clear Horizons

Cosmic Walker Wood Products

D & D Equipment

EcoEnergy LLC Ecomanity, LLC Energies Direct

Energize, LLC

Energy Concepts, Inc. Full Spectrum Solar

GHD, Inc.

Global Energy Options

GrassWorks, Inc.

Green Diesel Wisconsin Foundation

H&H Solar Energy Services, Inc.

Lake County Energy

Lake Michigan Wind and Sun, Ltd.

Legacy Solar

Marathon Renewable Energy, Inc.

**Marth Wood Products** 

Michael Fields Agricultural Institute Midwest Renewable Energy Association

Next Step Energy, LLC, Eau Claire

Northwind Renewable Energy, LLC, Stevens Point

**Organic Valley Cooperative** 

Partners in Forestry Landowners Cooperative

Photovoltaic Systems, LLC Prairie Solar Power & Light

RENEW Wisconsin Ritger Law Office

**Seventh Generation Energy Systems** 

The Nature Conservancy
Timmerman's Talents
UrbanRE Vitalization Group

W.E.S. Engineering Wave Wind, LLC

Wind Energy Systems LLC, Iron Ridge

Wisconsin Center for Environmental Education

Wisconsin Farmers Union Cooperative Wisconsin League of Conservation Voters

Date: December 16, 2009

RE: Support for policies included in the draft Clean Energy Jobs Act (SB 450 + AB 649)

Advanced Renewable Energy Tariffs, Low Carbon Fuel Standard, Biomass Crop Reserve Program, Fuels for Schools and Communities

The Homegrown Renewable Energy Campaign was formed to support policies we believe will be particularly effective at creating jobs and spurring economic growth in Wisconsin's rural communities. These policies are designed to promote energy independence by creating new markets for farmers, foresters, rural landowners, and businesses that wish to sell their crops for use in the production of clean energy. All four of those policies have been included to some degree in the draft bill of the Clean Energy Jobs Act (AB 649 + SB 450) recently circulated by Senators Plale, Miller and Representatives Soletski and Black. The Homegrown Renewable Energy Campaign supports these policies as included in the draft bill and is looking forward to working with legislative champions to ensure that the policies can be strengthened in a way to maximize their benefit to Wisconsin's farming and rural economies as outlined below.

#### **Advanced Renewable Energy Tariffs**

There are currently no guarantees that individuals, farmers, businesses and entrepreneurs wishing to make investments in renewable energy will receive fair prices from their electric utilities for extra energy they produce from their small-scale renewable energy systems. In the past, electric utilities voluntarily purchased electricity from owners of manure digesters, wind turbines and solar panels for excess energy those systems produce. These programs provided farmers with an additional revenue stream and brought more dollars into rural areas. Unfortunately, many Wisconsin utilities are no longer offering these programs (known as feed-in tariffs).

The draft of the Clean Energy Jobs Act charges the Public Service Commission to design mandatory programs that would create fair payments for excess energy produced from customer-sited renewable energy systems. Standardized buy-back rates encourage investments in small-scale renewable energy generation by providing fixed returns that allow farmers, homeowners, businesses and municipalities to adequately plan for the upfront investments these projects require. Because they are structured to support local generation sources only, <u>Advanced Renewable Energy Tariffs</u> are especially effective at attracting renewable energy manufacturers, creating local jobs, reducing energy bills and stimulating Wisconsin's economy.

The Homegrown Renewable Energy Campaign encourages the Wisconsin State Legislature to strengthen this section of the Clean Energy Jobs Act by removing language that exempts Rural Electric Cooperatives and Municipal Utilities from offering Advanced Renewable Energy Tariffs. In general the rural areas covered by these utilities are endowed with quality resources and have the greatest need for sustainable economic development. Furthermore, we believe that ensuring energy producers are provided a fixed price that includes a return on investment are essential to the success of a renewable energy tariff program. Creating fixed rates is essential to providing the financial certainty that will lift these industries to new heights.

#### Low Carbon Fuel Standard

A Low Carbon Fuel Standard would help break our dependence on foreign sources of oil and promote energy independence by gradually moving Wisconsin toward the cleanest and most efficient sources of transportation fuels. A Low Carbon Fuel Standard rates different types of transportation fuels by their efficiency and carbon footprint and establishes a schedule for using more of these fuels to power our vehicles.

<u>Biofuels are a winner under a Low Carbon Fuel Standard</u>. The economic benefit of producing fuel from Wisconsin farms has been clearly demonstrated in recent years. A Low Carbon Fuel Standard will create a market for more farmers to sell their crops. All of the existing corn ethanol plants in Wisconsin use

natural gas and have a lower carbon footprint than coal-fired ethanol plants in adjacent states; Wisconsin has tremendous opportunities to lower the carbon footprints of its corn ethanol plants even more by switching from natural gas to biomass for process heating. Advanced forms of biofuels under development in Wisconsin, such as cellulosic ethanol, biomass gasification diesel, and green gasoline will become particularly attractive due to their high efficiency and low carbon footprint. This policy will help ensure that Wisconsin remains a leader in the development of biofuels for decades to come.

Methane digesters on farms, factories and food processing plants will be especially attractive when producing biogas that can be used as a transportation fuel under a Low Carbon Fuel Standard. There are already several businesses and farms in Wisconsin producing biogas on with methane digesters. Businesses across the state have begun to produce the equipment for distributing the fuel and manufacturing components for vehicles specifically designed to use these homegrown transportation fuels.

The Homegrown Renewable Energy Campaign encourages the Wisconsin State Legislature to strengthen this provision in the draft Clean Energy Jobs Act by adding language that would set targets reducing the carbon content of our fuels at least 10% by the year 2020 as recommended by the Governor's Global Warming Task Force.

#### **Energy Crop Reserve Program**

The Energy Crop Reserve Program would direct payments to farmers and landowners who begin planting crops that can later be sold for the production of biofuels. This policy will ensure that farmers and landowners can continue to make profits from their working lands as they transition to the production of biofuels. Ensuring that there is an adequate supply of biomass will create even more economic development as the number of businesses, aggregators, distributers and biofuel producers increase in the state to take advantage of these new resources.

The draft legislation directs the Department of Trade and Consumer Protection to begin rulemaking proceedings to design an effective Energy Crop Reserve Program. The Homegrown Renewable Energy Campaign encourages the Wisconsin State Legislature to support the Energy Crop Reserve Program.

#### **Fuels for Schools and Communities Policy**

The Homegrown Renewable Energy Campaign also supports adding language to the Clean Energy Jobs Act that would create a Renewable Fuels of Schools and Communities program. Seven other states have already adopted similar policies that would establish a revolving loan program to generate capital for the purchase of equipment for biomass systems to be installed in schools and government-owned buildings. Wisconsin schools spend close to \$200 million dollars each year on energy. A recent study by the Biomass Energy Resource Center found that "200 to 300 schools in Wisconsin now heating with natural gas may find biomass heating economical at current fuel prices and these systems will often cash flow positive in their first year of installation." Biomass heating will save schools and communities tens of thousands of dollars in heating costs each year and help increase demand for local sources of energy.

The Clean Energy Jobs Act currently directs the Office of Energy Independence (OEI) to provide information, encouragement and assistance to school districts to provide opportunities for renewable energy. The Homegrown Renewable Energy Campaign supports including specific language that would designate a state agency responsible for establishing a revolving loan program for schools and communities to invest in biomass systems.

As members of the Homegrown Renewable Energy Campaign listed below, we would like to indicate our support for the Biomass Crop Reserve Program, Low Carbon Fuel Standard, Advanced Renewable Energy Tariff, and Fuels for Schools and Communities provisions of the Clean Energy Jobs Act. We look forward to working with the Legislature to ensure that these policies designed to promote economic growth in Wisconsin's rural economies remain integral parts of the Clean Energy Jobs Act.

#### The Homegrown Renewable Energy Campaign

A New Day Energy, LLC A-A Exteriors.com

Agrecol Corporation

Arch Electric, LLC

Artha Sustainable Living Center LLC, Amherst

**Better Environmental Solutions** 

Biomass Solution Bubbling Springs Solar Cardinal Solar, Sun Prairie

Clear Wisconsin Clear Horizons

**Cosmic Walker Wood Products** 

D & D Equipment EcoEnergy LLC Ecomanity, LLC Energies Direct Energize, LLC

Energy Concepts, Inc. Full Spectrum Solar

GHD, Inc.

Global Energy Options

GrassWorks, Inc.

Green Diesel Wisconsin Foundation

H&H Solar Energy Services Lake County Energy

Lake Michigan Wind and Sun, Ltd.

**Legacy Solar** 

Marathon Renewable Energy, Inc.

Marth Wood Products

Michael Fields Agricultural Institute Midwest Renewable Energy Association

Next Step Energy, LLC, Eau Claire

Northwind Renewable Energy, LLC, Stevens

**Point** 

**Organic Valley Cooperative** 

Partners in Forestry Landowners Cooperative

Photovoltaic Systems, LLC Prairie Solar Power & Light

RENEW Wisconsin Ritger Law Office

Seventh Generation Energy Systems

The Nature Conservancy
Timmerman's Talents
UrbanRE Vitalization Group

W.E.S. Engineering Wave Wind, LLC

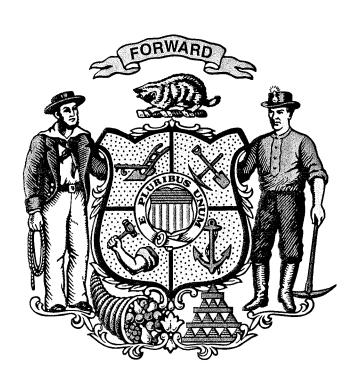
Wind Energy Systems LLC, Iron Ridge Wisconsin Biodiesel Association

Wisconsin Center for Environmental Education

Wisconsin Farmers Union Cooperative Wisconsin League of Conservation Voters

Wisconsin Towns Association

For more information about the Homegrown Renewable Energy Campaign please contact Bridget Holcomb of the Michael Fields Agriculture Institute at <a href="mailto:bridget@michaelfieldsaginst.org">bridget@michaelfieldsaginst.org</a> or 608-256-1859



# Hearing Notes January 20, 2010

# Call Public Hearing to Order and ask Clerk to call the roll

• ROLL CALL

# **Roy Thilly and Tia Nelson**

Explanation of Governor's Task Force on Global Warming

# **Legislative Council Briefing on SB 450**

John Stolzenberg and David Lovell

# Public Hearing concludes, adjourn meeting



# WISCONSIN STATE LEGISLATURE



Assembly Special Committee on Clean Energy Jobs Senate Select Committee on Clean Energy

# Briefing on Assembly Bill 649 and Senate Bill 450

John Stolzenberg and David L. Lovell Legislative Council

January 20, 2009

2010

## Legislative Council Documents

- · Topical Index
- Overview
- Description
- Status of implementation of Governor's Task Force final report (Coming Soon)

Posted at <a href="http://www.legis.state.wi.us/lc/publications/climate/index.htm">http://www.legis.state.wi.us/lc/publications/climate/index.htm</a>

2

#### Thrusts of Bill

- Goals
- · Energy generation
- · Energy use
- · Emissions regulations

3

# **Briefing Overview**

- Goals
- · PSC-administered programs
- Transportation
- Buildings and equipment
- State and local government

4

# Briefing Overview, con't.

- Bioenergy
- Industrial energy efficiency
- · Cap and trade program report
- · Program coordination and evaluation
- Public education

5

#### What Bill Does NOT Do

- Does not implement the entire Task Force report
- Does not create a "cap and trade" program

#### Funding and Position Authorizations

#### The bill:

- Funds some programs via fees and assessments
  - Other programs unfunded
- Creates delayed appropriation for Energy Crop Reserve Program
  - \$0 in Ch. 20 schedule
- · Does not authorize any state positions

7

#### Goals

8

#### Goals

- · Greenhouse gas (GHG) emissions
- · Energy conservation
- · Renewable energy
- New buildings

9

#### Goals

- · Goals are aspirational, not enforceable
- Parallel goals apply to state government and to the state, as a whole

10

#### **PSC-Administered Programs**

11

## **PSC-Administered Programs**

- · Energy efficiency programs
- · Renewable Portfolio Standard
- · Renewable ("Feed-In") Tariffs
- · New nuclear power plants

## **Energy Efficiency Programs**

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## **Energy Efficiency Programs**

#### Current programs:

- · Statewide programs
  - Funded by electric and natural gas utilities
  - Operated by 3rd party administrator as "Focus on Energy"
- · Coops and municipal utilities
  - "Commitment to Community" programs
  - Option of participating in statewide programs

14

# **Energy Efficiency Programs**

#### The bill addresses:

- -Scope
- Funding
- Program accountability
- Utility earnings
- Wholesale suppliers

15

#### Scope

- Current programs apply to users of electricity and natural gas
- Bill expands programs to users of LP gas and heating oil

16

# Funding - Statewide Programs

- Current statewide programs funded at 1.2% of utilities' annual operating revenues
- Bill replaces this with 4-step process to set program goals and budgets

Funding – New 4-Step Process

Estimate of energy savings potentially achievable by programs ("potential study")



Program goals based on estimates



Program budgets based on goals



Program funding collected by energy suppliers, based on budgets

18

# Funding – Commitment to Community Programs

- Current Commitment to Community programs funded at \$8 per meter
- Under bill, the coop or municipal utility sets its budget

19

## **Program Accountability**

- · Tighter auditing and reporting
- PSC review of programs that fail to meet goals
  - If good-faith effort was made, use review to improve program
  - If no good-faith effort found, impose remedies

20

#### Remedies

#### Remedies include:

- · Make up missed portion of goals
- Exercise penalty provisions of contracts
- · Modify or terminate contracts
- Require coop or municipal utility to contract with statewide program

21

# **Utility Earnings**

<u>Current law</u>: Utilities earn return on capital investments

<u>The bill</u>: Utilities may also earn return on efficiency investments:

- Only if PSC determines investment is costeffective means of advancing efficiency
- Only on portion of capital expense attributable to increase in efficiency over alternatives

22

# Wholesale Suppliers

Wholesale electric coops and "municipal electric companies"

- May assume all program responsibilities on behalf of members and customers
- May demonstrate compliance of members and customers in aggregate

Renewable Portfolio Standard (RPS)

24

# Renewable Portfolio Standard (RPS)

#### The bill:

- · Revises the standard
  - Includes in-state component
- · Expands sources of energy included
- · Revises renewable resource credits

25

#### **Current Standard**

Percentage of electricity sales that must be from renewable resources:

- 2006-09: 4%
- 2010-14:6%
- · 2015 and thereafter: 10%

26

#### **New Standard**

Percentage of electricity sales that must be from renewable resources:

- 2010-12: 6%
- 2013-19: 10%
- 2020-24:
  - 20% overall
  - -6% from in-state sources
- 2025 and thereafter:
  - 25% overall
  - 10% from in-state sources

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# Sources of Energy Included – Hydroelectric

<u>Current law</u>: excludes energy from facilities > 60 MW

#### The bill:

- Includes energy from facilities >60 MW only for new capacity located out of state
- Limits on use of new Manitoba Hydro facilities

28

## Sources of Energy Included – Solid Waste

<u>Current law</u>: includes energy from pre-1998 facilities that burn refuse-derived fuel

The bill: also includes energy from pre-1998 facilities that both:

- Burn waste from which recyclable and non-combustible materials have been removed; and
- Are owned by a county in this state

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# Sources of Energy Included – Nonelectric Energy

- Thermal output from:
  - Cogeneration plant
  - Existing boiler converted to biomass fuel
  - Geothermal system
  - Solar water heating system
- · Biogas
- · Light delivered by "light pipe"

# Sources of Energy Included – Nonelectric Energy

Included in RPS only if the energy:

- Is generated in this state at a facility placed in service after effective date
- · Displaces use of fossil fuels

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## Renewable Resource Credits – Current Law

- Credit created if electric provider sells excess renewable energy
- · Credits tradable, bankable
- · Credits expire generally after 4 years
- Exception no credit from utility-owned hydroelectric facilities

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#### Renewable Resource Credits – The Bill

- Credits created when renewable energy generated
- Credits are a commodity separate from the renewable energy
- · Credits tradable, bankable
- · Credits do not expire
- Exceptions no credits from:
  - Utility-owned hydroelectric facilities
  - Nonelectric energy

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## Wholesale Suppliers

Wholesale electric coops and "municipal electric companies" may demonstrate compliance:

- · On behalf of members and customers
- · Of members and customers in aggregate

34

# Renewable ("Feed-In") Tariffs

35

# Renewable ("Feed-In") Tariffs

- · What is it?
- Requirement
- · Exceptions and program limits

#### What's a Renewable Tariff?

- · Requirement that electric utilities:
  - Offer to purchase electricity generated from a renewable resource
  - Under standard, predefined purchase terms and conditions prescribed by a utility regulator
- Typically applied to small-scale, distributed facilities

37

## Requirement

PSC must order retail electric utilities to offer renewable tariffs for at least:

- Photovoltaic energy
- Wind power
- Gas made from a renewable resource

38

# **Exceptions and Program Limits**

- · Exceptions permitted for -
  - Large electric utility's voluntary initiatives
  - Small electric utilities
  - Differing terms and conditions mutually agreed to by utility and renewable facility owner or operator
- PSC may limit requirement based on number of facilities, total generating capacity, or total renewable energy

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#### **New Nuclear Power Plants**

40

#### **New Nuclear Power Plants**

- · Current law
- · Approval of new plants
- · Application of other utility regulations
- · Non-severability clause
- · Delayed effective date

41

#### **Current Law**

- Any new power plant over 100 MW must obtain a certificate of public convenience and necessity (CPCN) from PSC
- · Exemption for merchant plants:
  - "Needs" test
  - Certain design considerations

#### Current Law, con't.

Nuclear power plants have additional CPCN requirements:

- Federally licensed high-level nuclear waste disposal facility
- Comparatively economically advantageous to ratepayers

43

# Approval of New Nuclear Power Plants Under Bill

- Applies CPCN to any size nuclear plant, irrespective of ownership
- · Changes CPCN requirements:
  - Replaces radioactive waste disposal req't.
  - Modifies comparative economic benefit req't.
  - Adds reasonable cost req't.
  - Removes merchant plant exemptions
  - Removes needs test and adds entire output reg't.

44

# Application of Other Utility Regulations

Bill applies certain utility regulations to new nonutility nuclear power plants:

- · Certificate of authority for plant improvements
- · Decommissioning
- · PSC approval of plant sale
- · Service standards
- Questionnaires
- Penalties

45

#### Non-Severability Clause

Bill includes a clause that voids all nuclear related provisions in the bill if:

 A court finds the new entire output req't. unconstitutional

46

# **Delayed Effective Date**

All nuclear related provisions in the bill delayed until:

- PSC has initially implemented new energy efficiency and RPS programs
- PSC has published a notice after these actions completed

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Vehicles, Fuels,
Planning, and
Transportation Infrastructure

# Vehicles, Fuels, Planning, and Transportation Infrastructure

- · California vehicle emissions standards
- · Engine idle reduction
- · Low carbon fuel standard
- · Carbon-audited transportation investments
- DOA planning grants for compact development
- · Model parking ordinance
- · Surface transportation planning
- · Growth accommodation incentives

#### **CA Vehicle Emissions Standards**

- Required by DNR rule: CA GHG emission standards and other emission standards
  - Applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles > 10,000 pounds
  - Must conform with Clean Air Act
- Authorized by DNR rule: CA zero emission vehicle (ZEV) standards
  - Only if effective and efficient way to meet state GHG emission reduction goals

50

# **Engine Idle Reduction**

Prohibits freight truck drivers after January 1, 2011:

- Idling truck's primary propulsion engine > 5 minutes in any 60-minute period:
  - Applies on or off a highway
  - 7 exceptions (traffic jam, outdoor temperature, medical needs, maintenance, etc.)

51

49

# Low Carbon Fuel Standard (LCFS)

- · What is a low carbon fuel standard?
- Requirement

52

# What is a Low Carbon Fuel Standard?

- Specifies allowable weight of GHG emissions per unit energy content of transportation fuels sold by provider
- · Determined over the "life cycle" of a fuel

Requirement

- Requires DNR to specify a state LCFS by rule if:
  - MGA advisory group recommends model standard
  - 9 specified governors, including WI Governor, endorse model standard
- Any LCFS must be consistent with model standard and include regional credit trading system

54

# Carbon-Audited Transportation Investments

- DOT must include in transportation project environmental analysis an evaluation of GHG emissions and energy use, if it:
  - Prepares an EIA or EA on the project
  - Project funded partly or totally with state funds
- DOT must consider GHG emissions and energy use in its 2030 multimodal transportation plan

55

# DOA Planning Grants for Compact Development

Promotes "traditional neighborhood development" (TND) by:

- · If a grant includes TND, requires recipient to:
  - Consider specified TNDs;
  - Whether TND designation would result in a reduction in travel, energy use, or GHG emissions
- Adds grant preference criterion for consideration of TND

56

## Model Parking Ordinance

 Directs UW-Extension to develop model market-pricing parking ordinance.

57

## Surface Transportation Planning

Requires DOT and metropolitan planning organizations (MPOs) to:

- Set surface transportation GHG reduction goals
- Incorporate, "to the extent practicable," strategies identified by DOT for reducing GHG emissions into transportation plans and programs
- Assess and report on implementation of their strategies and progress in meeting their goals

58

# Surface Transportation Planning, con't

Prohibits DOT from funding an MPO unless MPO has made a good faith effort to:

- Incorporate DOT's GHG reduction strategies
- Use DOT's methods and procedures in its plans and programs

59

# Growths Accommodation Incentives

Applies to 5 economic development grant or loan programs:

- Transportation Facilities Economic Assistance and Development Program (DOT)
- Brownfields Site Assessment Grants (DNR)
- Main Street Program (Commerce)
- Brownfields Grant Program (Commerce)
- Forward Innovation Fund (Commerce)

# **Qualifying Projects**

 Result in a reduction of travel, energy use, or GHG emissions

OR

 Located in an area designated for a qualifying TND, subject to green building code or to a qualifying "Green Tier" project

61

# Types of Incentives

- Authorizes administering agency to give greater weight in determining whether to make award to a municipality or county
- Changes required match, amount of assistance, or other grant conditions
- · Does not change program funding

62

# Energy Efficient Buildings and Equipment

63

## **Energy Efficient Buildings**

- · Building Codes
- Use of Int'l Energy Conservation Code
- "Green Building Code"
  - Voluntary, in private sector
  - Most state building projects must comply
- · Conservation standards for ag. buildings

64

# **Energy Efficient Equipment**

- Consumer Appliances:
  - Standards for TVs, DVDs, and certain audio equipment
- · Industrial Boilers:
  - Owners must annually inspect and adjust to maximize efficiency

State and Local Government

#### State and Local Government

- · State agencies
- · School districts
- · Municipal governments

67

# **State Agencies**

Agencies with largest energy use must:

- · Assess GHG emissions
- · Set GHG emission reduction goals
- · Develop plans to meet goals
- DOA develops guidelines and protocols

68

#### **School Districts**

Same program as state agencies, but voluntary

· OEI to assist interested districts

69

## **Municipal Governments**

Excludes expenditures on energy projects from levy limits

 Similar provision applicable to school districts enacted in 2009 Act 28

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# Bioenergy

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# Bioenergy

- Biomass production on crop lands
- · Biomass production on forest lands
- · Study of market incentives

## Biomass Crop Reserve Program

Financial assistance for establishment and production of biomass crops

- Cost-sharing payments cost of planting
- Income replacement payments until crop can be harvested
- Production payments per ton of crop harvested and used for energy production

73

## Biomass Crop Reserve Program

- · DATCP contracts with growers
- · Growers must comply with:
  - Planting and harvesting guidelines
  - Soil and water conservation standards

74

#### Biomass Production on Forest Lands

- Private Forest Landowner Grant Program
  - Reduced co-pay for tree planting
- · Emission reduction credits
  - DNR to develop standards
- Outreach to private forest owners
  - Education about GHG reductions, credits

75

## Bioenergy Feedstock Production Incentive Study

- Study whether current incentives are sufficient to motivate biomass production
- · Consider incentives created by:
  - Private markets
  - Government programs

76

# Industrial Efficiency Incentives

77

# **Industrial Efficiency Incentives**

- Air permitting streamlining for minor source projects reducing GHG emissions
- 25% set aside of federal "volume cap" for municipal IRB's for:
  - Clean energy manufacturing facilities
  - Renewable power generating facilities

# Cap and Trade Program Report

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# Cap and Trade Program Report

Directs DNR to report to Legislature and Governor if:

- Federal cap and trade program established OR
- Regional cap and trade program recommended by Midwestern governors, including WI Governor

80

# Program Coordination and Evaluation

81

# Climate Change Coordinating Council (CCCC)

- Membership: Secretaries of 6 agencies, plus UW-System and OEI
- Duties:
  - Assist state agencies with climate programs
  - Prepare quadrennial policy review and report
  - Promote and coordinate education programs
- Staff support provided by represented agencies

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## Program Evaluation – Multi Step Process

DNR information gathering & analysis

DNR quadrennial assessment

CCCC quadrennial policy review & report to Legislature & Governor

83

# DNR Information Gathering & Analysis

- · GHG emissions and sequestration information
  - Emission reporting requirements
- New accounting system to estimate net annual GHG emissions from natural sources
- · GHG inventories and analyses

# DNR Quadrennial Assessment - Inputs

#### Based on review of:

- · Changes in net GHG emissions
- Public & private climate change goals and programs
- Other relevant information, including other agency reports in the bill

85

#### DNR Quad. Assessment - Content

- Whether state meeting GHG emissions reduction goals
  - Whether making continuous progress
- If needed, proposals for alternative programs to meet goals
- · Changes in goals or nonregulatory programs
  - Effectiveness, cost, federal initiative or new scientific understanding
- Impacts of new or changed programs on state GHG emissions and energy use

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# CCCC Quadrennial Policy Review & Report

- Whether state meeting GHG emissions reduction goals
  - Making continuous progress
- If needed, changes in programs to meet goals
- · Other changes in goals
- Impacts of recommendations on state GHG emissions, energy use, and economy

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## **Public Participation**

- · DNR's GHG emissions inventories
- DNR's methodologies to estimate effects of policies, etc. on GHG emissions
- · DNR's quadrennial assessments

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#### **Public Education**

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#### **Public Education**

- CCCC to coordinate statewide public education programs
- Priority on programs for students and teachers

# Public Education Program Elements

- · State GHG and energy goals
- · Assessments of GHG emissions
- · State activities related to GHG emissions
- Actions other persons can take
- Other significant mitigation and adaptation strategies
- · Causes and effects of climate change

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## Public Education - Internet

- DNR must maintain climate change web site
- · Central Internet site for state
- Present data, inventories, reports, etc.



# WISCONSIN STATE LEGISLATURE





## John Muir Chapter

Sierra Club - John Muir Chapter 222 South Hamilton Street, Suite 1, Madison, Wisconsin 53703-3201 Telephone: (608) 256-0565 Fax: (608) 256-4562 shahla.werner@sierraclub.orghttp://wisconsin.sierraclub.org

#### Support SB 450 / AB 649, The Clean Energy Jobs Act

Before the Select Committee on Clean Energy, 02/10/10, RM 412E, Don Ferber, Executive Committee Member, Sierra Club- John Muir Chapter

First, I would like to thank Committee co-chairs Miller and Plale for holding this public hearing on the Clean Energy Jobs Act today. My name is Don Ferber and I am a member of the Sierra Club – John Muir Chapter's Executive Committee. The Sierra Club is grateful to have the opportunity to speak to you today about transportation, energy efficient buildings and equipment, and bioenergy provisions of the Clean Energy Jobs Act.

Transportation accounts for 24% of Wisconsin's greenhouse gas emissions. Recognizing the significant contribution of transportation to climate change, the Sierra Club strongly supports the inclusion of transportation provisions in the Clean Energy Jobs Act. According to the Urban Land Institute's July 2009 report *Moving Cooler*, greenhouse gas emissions from the transportation sector can be reduced by improving the energy efficiency of vehicles, reducing the carbon content of fuels, reducing the number of vehicle miles driven, and improving the efficiency of the of the transportation system. We are pleased that SB 450 addresses all of these policies that are essential to meeting Wisconsin's greenhouse gas reduction targets.

The Sierra Club favors changes to our transportation system that create an accessible, affordable system of transportation while reducing greenhouse gases and environmental impacts on the health and natural resources of communities and the state. Our organization has been very active in trying to reduce transportation's contributions to climate change by supporting the ability of local communities to form regional transit authorities statewide, supporting intercity rail, and providing comments on how WisDOT's Transportation 2030 plan can promote compact development and increase transit alternatives. Sprawl does indeed cost us all.

The Sierra Club is pleased to see provisions in the Clean Energy Jobs Act that support vehicle and fuel efficiency, include restrictions on freight truck idling, enact a low carbon fuel standard, enacting California emissions standards, and implement a model parking ordinance. The Sierra Club supports directing the DNR to specify a low carbon fuel standard. Converting Wisconsin's auto fleet to lower emission vehicles would show leadership and set us on the path to lowered emissions.

While all vehicles must operate efficiently regardless of fuel type, it is clear that merely addressing the efficiency of vehicles and the carbon content of fuels will not be enough to reduce transportation emissions. Over time, these reductions will be offset by increases in travel and population. Provisions in the Clean Energy Jobs Act to incentivize traditional neighborhood development in local communities, to require Wisconsin's fourteen Metropolitan Planning Organizations to reduce greenhouse gas emissions, and to require WisDOT to evaluate greenhouse gas emissions for major plans and projects must be included in this bill. These policies will reduce sprawl, save taxpayers money, create more livable communities, and effectively address our contribution to climate change.



# WISCONSIN STATE LEGISLATURE



Thank you to the Members of the Senate for this opportunity to testify. My name is Andy Grimmer and I am representing the employees and owners of ANGI Energy Systems and I am testifying in support of the US Natural Gas Vehicle Industry. With your permission, I would like to read a prepared statement.

# Written Testimony Submitted by Andy Grimmer, President ANGI Energy Systems, Milton WI Before the Wisconsin Senate Clean Energy Jobs Act Committee Low Carbon Fuel Standard: Opportunities for Wisconsin February 10, 2010

ANGI Energy Systems is a Wisconsin-based company which for over 25 years has specialized in design, manufacture and installation of compressed natural gas refueling stations. Our company was founded during the oil embargo period of the 1980's when this country first faced serious oil shortages and was forced to considered alternative fuels.

Since ANGI's inception, we have built and delivered over 800 natural gas refueling stations serving customers in over 20 different export markets and to customers here in the United States. Everyday tens of thousands of compressed natural gas powered buses, trucks and cars around the world are refueling using the products produce by ANGI in Milton, Wisconsin.

We at ANGI stand in support of a Clean Energy Jobs Act and in support of a Low-Carbon Fuel Standard (LCFS) for Wisconsin that will promote the increased use of all the safe, viable, domestic and cleaner transportation fuels including compressed natural gas (or CNG).

#### Introduction

(So why natural gas?) Increased use of natural gas as a transportation fuel reduces greenhouse gas emissions and contributes toward achieving other important public policy objectives in Wisconsin, including petroleum replacement, energy diversity, improved air quality, and increased economic activity. These benefits accrue from the fact that natural gas is a cleaner fuel than petroleum and, also, is a domestic fuel with a significant reserves,

and, additionally, because it can also be easily produced from Wisconsin's biomass feedstocks.

#### Greenhouse Gas Emissions – a Solution that is Available Today

Nearly every day brings new reports about the importance of reducing greenhouse gas emissions and it is becoming clear that action is needed sooner rather than later. Natural gas is a solution that can help reduce greenhouse gases today. Per unit of energy, natural gas contains less carbon than any other fossil fuel, and thus produces lower carbon dioxide (CO2) per vehicle mile traveled. The conclusion of recent studies such as those conducted by the California Air Resources Board (CARB) and others is that, when used as transportation fuel, natural gas can reduce greenhouse gas emissions by 20 – 29 percent when compared to diesel and gasoline fuels.

In the future, these benefits could increase as natural gas is blended with renewable biogas. Transportation fuel from biogas reduces carbon emissions by almost 90% when compared with gasoline and diesel fuel. Therefore, blending conventional supplies of natural gas with renewable biogas holds great promise of reducing greenhouse gas emissions and meeting the carbon reduction objectives being considered in the Low-Carbon Fuels Standard.

## **Criteria Pollutants – Helping to Improve Air Quality**

The increased use of natural gas vehicles also can play an important role in helping Wisconsin to reduce criteria pollutants that contribute to unhealthy air quality. This is because exhaust emissions from natural gas vehicles (NGVs) are generally lower than those of gasoline and diesel powered vehicles. For example, the natural gas-powered Honda Civic GX is one of the cleanest vehicles available anywhere in the world. In fact, the U.S. EPA has said that the CNG Civic is the cleanest commercially available, internal-combustion vehicle on earth. Compared to its companion gasoline Civic, the CNG powered Civic produces 95% fewer emissions of non-methane hydrocarbons, and 75% less emissions of nitrogen oxides. This CNG powered car is being manufactured in an assembly plant here in the Midwest and is available for sale at a Wisconsin dealer in LaCross.

# Natural Gas Supply: An Abundant Domestic Resource

Nearly a third of the energy consumed in the U.S. is in the form of natural gas. This percentage is likely to increase in the future as policy makers and consumers look for energy solutions that are cleaner and that can be domestically supplied. Some have raised concerns about whether U.S. supplies are adequate to supply growing demand for natural gas. However, these concerns have largely been put to rest as the use of new production

technology and new discoveries have significantly increased the natural gas supply base here in the U.S. and in North America.

One of the biggest energy innovations of this decade is considered to the development of unconventional natural gas fields in tight shale formations here in the US. Gas from these formations is a large reason why estimates of our domestic reserves are being substantially revised upward.

These gas reserve may also be supplemented by biogass produced in Wisconsin. Estimates prepared by the Gas Technology Institute located in Chicago, conclude that Wisconsin holds the potential to produce 50 billion cubic feet of biogas annually. If all this gas was blended with pipeline quality gas that would be the equivalent of 40 million gallons of gasoline.

Because of this abundance, this fuel is a low-cost fuel that can improve the economics of goods movement and reduces the cost of public transportation. Compressed natural gas at recent prices is equivalent to approximately \$.86/gallon, providing substantial savings for every vehicle operator in Wisconsin that makes the switch.

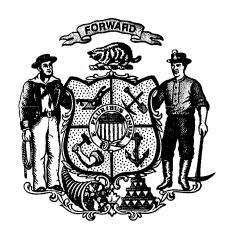
Examples of how this low cost is impacting the cost of transportation include a gas company in Utah that retails CNG fuel at public stations at less than one dollar per equivalent gallon of gasoline and a School District in Fort Atkinson, Wisconsin who realized a fuel savings of \$19,000 per year by switching all its school buses to CNG. In addition, new U.S. supplies of natural gas are projected to only increase the price advantage of natural gas as compared to petroleum beyond 2025. In fact, according to the Department of Energy's Annual Energy Outlook of 2010, the price of natural gas is projected to remain less than half the price of petroleum through 2035.

#### **Jobs**

ANGI Energy Systems has approximately 90 employees and a supply chain extends to other manufacturers in Wisconsin and the Midwest. While the employment we maintain and exports we produce are important to Wisconsin, ANGI's growth and viability moving forward will be based upon the an expanded commitment to use natural gas a transportation in this domestic market. Moving towards this cleaner fuel in Wisconsin does provide another example of how we can re-tool the Wisconsin economy to create jobs.

#### Conclusion

Natural gas is clean, it is abundant, it is low-cost and it is readily available here in the U.S. With available vehicle technology and refueling technology, the use of natural gas for transportation becomes increasingly attractive and holds a huge potential. With right incentives and support we can realize this potential and meet the policy objects associated with the Clean Energy Jobs Act and the Low-Carbon Fuel Standard (LCFS).







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# Before the WISCONSIN JOINT SELECT COMMITTEE ON CLEAN ENERGY Wisconsin Legislature Madison, Wisconsin

February 10, 2010

# COMMENTS OF THE CONSUMER ELECTRONICS ASSOCIATION ON

## SB450 / AB649

The Consumer Electronics Association (CEA) represents more than 2,000 companies, including more than 30 companies in Wisconsin, involved in the design, development, manufacturing, distribution and integration of audio, video, in-vehicle electronics, wireless and landline communications, information technology, home networking, multimedia and accessory products, as well as related services that are sold through consumer channels. CEA members design, make, sell and install consumer audio and video equipment, televisions and other high tech products which could be impacted by SB450 / AB649 or similar legislation.

CEA's concerns are limited to only two pages of the legislation and three specific provisions contained in the current versions of SB450 / AB649:

- 1. Compact audio products;
- 2. DVD players and recorders;
- 3. Televisions.

## Appliance energy efficiency standards are not appropriate for electronics.

Consumer electronics are vastly different by design and function than the residential, industrial and commercial equipment that is listed in this legislation. The market for consumer electronics is dynamic, highly competitive and characterized by rapid innovation, significant time-to-market pressures, rapid rates of market penetration, and rapid transition from one technology to another. These characteristics are a major distinction between the high tech products included in the legislation (compact audio products and DVD players/recorders, televisions and other equipment named in the bill (boilers.).



In addition, there are significant design, performance and use differences between televisions, consumer audio and video products and the electro-mechanical equipment listed in this legislation. Unlike such equipment, which tends to be designed for a single purpose (heating, cooling, etc.), TV's, audio, video and other consumer electronics are complex, high tech devices that typically offer several features and functions and are used in at least three ways that distinguish them from commercial and industrial machines. People use consumer electronics to (1) communicate with one another; (2) be entertained; and (3) to receive and store and transfer information. We believe it is inappropriate and economically and technologically damaging for Wisconsin to burden consumers, retailers and manufacturers of high tech products with state-imposed regulations for energy efficiency –especially when better alternatives exist which are already working to save energy, such as the national ENERGY STAR program.

Artificial energy use limits on TVs were recently proposed in California, where a study demonstrated that this type of regulation would have profoundly negative economic impacts, including the unnecessary removal of a significant number of TVs from retail store shelves, resulting in lost sales and lost jobs.

A recent study of a proposal for energy use regulations in California projected that such measures, which were intended to remove a significant share of TVs from store shelves, would destroy 4,600 jobs tied to TV sales, distribution and installation, and also would cost California \$50 million a year in lost tax revenues (Source: Resolution Economics, LLC).

Voluntary, consumer-oriented programs such as ENERGY STAR are already in place, have been highly successful, and have resulted in significant energy savings and reduced greenhouse gas emissions.

The consumer electronics industry is a strong supporter of the voluntary, market-driven and national approach to saving energy represented by the federal ENERGY STAR program (www.energystar.gov). This successful public-private partnership, which benefits from strong participation by manufacturers and retailers, captures a broad range of consumer electronics – including the consumer audio and video named in SB450 / AB649. ENERGY STAR succeeds by creating a competitive incentive for energy savings. The ENERGY STAR program, coupled with the natural trends toward energy efficiency in electronics design, provides consumers with the products and features they demand, along with a logo recognized by more than 70 percent of consumers. The market penetration of ENERGY STAR products in the consumer electronics sector has been significant, particularly for televisions and consumer audio and video products for which this legislation proposes regulatory mandates. The success of ENERGY STAR represents an energy savings achievement in Wisconsin and the U.S. Notably, this achievement is a direct result of the voluntary, industry-supported and consumer-focused nature of the ENERGY STAR program. Wisconsin state regulations for televisions and consumer audio and video products are completely unnecessary.

# **ENERGY STAR Program Achievements: Energy Saved (Billion kWh)**

ENERGY STAR Product Category	2005	2006	2007
Consumer Electronics (including A/V)	9.3	12.3	14.7
Residential Office Equipment	9.5	6.3	8.5

Source: ENERGY STAR Annual Reports, 2005-2007.

# **ENERGY STAR Program Achievements: Emissions Avoided (MMTCE)**

ENERGY STAR Product Category	2005	2006	2007
Consumer Electronics (including A/V)	1.9	2.4	2.8
Residential Office Equipment	1.9	1.2	1.6

Source: ENERGY STAR Annual Reports, 2005-2007.

New federal specifications are now in place for consumer audio and video products as well as televisions.

The ENERGY STAR program, as administered by the U.S. Environmental Protection Agency, has a proven ability to keep pace with the rapidly-evolving consumer electronics industry. Next generation specifications for consumer audio and video products, including TVs, have been finalized and are now in place.

The latest version (Version 2.0) of the ENERGY STAR specification for Audio/Video (A/V) products is final as of November 16, 2009. All A/V products that offer audio amplification or removable disc playback (e.g., CD, DVD, Blu-ray) are now eligible to earn the ENERGY STAR. The new specification establishes on-mode and low-power sleep-mode power consumption limits and Auto Power Down requirements that A/V products must meet in order to earn the ENERGY STAR label. Consumer A/V products covered under Version 1.0 Audio/DVD program, including Home-Theatre-in-a-Box, audio amplifiers, A/V receivers, Shelf systems, DVD Players, and Blu-ray Disc players, will be subject to these new requirements on July 30, 2010. Products previously excluded from earning the ENERGY STAR, such as commercial audio amplifiers and docking stations, are eligible to qualify under the new requirements effective immediately.

The Version 4.0 and 5.0 ENERGY STAR specifications for TVs have been finalized as of September 3, 2009. These requirements establish challenging on-mode power consumption levels, take steps to ensure a TV is viewed in the mode in which it qualified for ENERGY STAR so consumer savings are realized, and curb energy associated with downloading program guide data. The effective date for the Version 4.0 requirements in this specification is May 1, 2010. The effective date for the Version 5.0 requirements is May 1, 2012. ENERGY STAR qualified TVs use about 30 percent less energy than standard units.

# States have overwhelmingly rejected appliance efficiency standards for high tech consumer products

State	Bill No. (Year)	Mandatory standards and regulations for consumer audio and/or video products
AZ	HB 2390 (2005)	Rejected
CT	HB 5523 (2006)	Rejected
НІ	HB 3050 (2006) HB555 (2009)	Rejected
MD	SB 674 (2007) HB1238 (2009)	Rejected
MO	SB433 (2009)	Rejected
MN	SB 656/HF 864 (2009)	Rejected
NJ	AB 1763/SB 1253 (2009)	Rejected
NV	SB242 (2009)	Rejected
RI	SB 2844 (2006) & HB 7610 (2006)	Rejected
TN	HB 46/SB827 (2007) HB1709/SB486 (2009)	Rejected
TX	SB 16 (2009) SB 12 (2007)	Rejected
VT	HB 253 (2006) H316 (2009)	Rejected
WA	HB 2758 (2008) HB1004 (2009)	Rejected

#### Conclusion

CEA is a strong supporter of the voluntary, market-driven and national approach to energy efficiency represented by the federal ENERGY STAR program. This successful government-industry effort, which benefits from strong participation by retailers and manufacturers, captures a broad range of consumer electronics and creates a competitive

incentive for energy savings. This program, coupled with the natural trends toward energy efficiency in electronics design, provides consumers with the products and features they demand.

In many ways, electronics are part of an energy savings solution. Many home networking products help save energy by providing increased control over home heating, cooling and lighting systems. Information technology and telecommunications products allow teleworking and remote access to information and entertainment content, both of which save fuel and reduce greenhouse gas emissions.

A new national study commissioned by the Consumer Electronics Association (CEA®) shows that using electronics to telecommute saves the equivalent of 9 to 14 billion kilowatt-hours of electricity per year — the same amount of energy used by roughly 1 million U.S. households every year.

The findings also indicate the estimated 3.9 million telecommuters in the United States reduced gasoline consumption by about 840 million gallons, while curbing carbon dioxide (CO2) emissions by nearly 14 million tons. This level of CO2 reduction is equal to removing 2 million vehicles from the road every year.

CEA respectfully urges you to oppose SB450 / AB649 in its current form and remove the section of the bill mandating artificial –and unnecessary– energy limits for consumer electronics.

Respectfully submitted,

CONSUMER ELECTRONICS ASSOCIATION

Amy Dempster
Manager, Environmental Policy &
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